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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,870	03/04/2002	J. Alan Lawson	17308-0019	5875
29052	7590	01/18/2006	EXAMINER	
SUTHERLAND ASBILL & BRENNAN LLP 999 PEACHTREE STREET, N.E. ATLANTA, GA 30309			HALPERN, MARK	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/090,870		LAWSON ET AL.	
	Examiner		Art Unit	
	Mark Halpern		1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7, 10-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/16/2005 has been entered.

In the Amendment received 11/16/2005, claim 1 is amended, claims 13 and non-elected claims 25-47 are cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stegelman (4,285,805). Stegelman discloses an apparatus, an electrostatic filtering system, for continuous removal of solids from flowing liquid by applying a voltage gradient of about 5 to 20 kv per inch, between outer electrode and inner electrode (which reads on an anode and cathode). The voltage gradient causes the solids in the fluid to collect on filter beads. The outer electrode is supported by rods and connected

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to a source of high voltage (col. 2, line 15 to col. 3, line 15, and Figure 1). It would have been obvious to one skilled in the art at the time the invention was made to have the rod tapered in order to improve the efficiency of the transfer of electrons from anode to cathode.

3) Claims 2-7, 10-12, 14-16, 19-24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Stegelman in view of Jagannadh (5,238,538). Stegelman is applied as above for claim 1, Stegelman does not disclose the liquid being an aqueous slurry of cellulosic fibers. Jagannadh teaches applying a direct current electric field (Abstract) to a decontamination cell (deinking cell) 1, wherein pulp slurry (14) is diluted (22) to a consistency of 0.8 to 6.14 (col. 7, lines 63-66) to form a slurry of recycled cellulosic wood fibers (fluid) which passes through the deinking chamber and exits out the other side in a continuous manner (col. 4, lines 43-45). It would have been obvious to combine the teachings Stegelman and Jagannadh because such a combination would expand the design of Stegelman to removal of contamination in fluids in the papermaking industry. Jagannadh further discloses that a portion of the contaminants are separated from the fibers as the slurry flows through the deinking chamber (col. 4, lines 22-29); see col. 8, lines 57-59 for recycling newspapers; see Figures 2-7 for different arrangements of anodes and cathodes with the pulp slurry flowing in between; see Figure 2D for tapered anode and cylindrical housing. If necessary, Jagannadh teaches the shape of the container or the relationship between the anode and cathode would have been an obvious design modification; see Figures 6A and 6B for cells having a "T" or "L" shapes; see col. 4, lines 2-26 for creating gas bubbles which causes

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flotation of the contaminants and col. 4, lines 64-67 for adding aor into the slurry.

Jagannadh teaches treating the same material (waste paper) in the same manner (with direct current electric field applied between an anode and a cathode) for the same purpose (to remove ink and other contaminants from the paper). It would have been obvious to optimize the size of the air bubbles introduce at the bottom of storage tank 12 or created in vessel 18; see col. 7, lines 46-58 for the velocity of the fluid (waste paper slurry).

4) Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stegelman as applied to claim 1 above, and further in view of Lawson (5,733,413) or Lawson (6,139,684) or Markham (5,580,446). Lawson ('413) or Lawson ("684) or Markham teach using a light contamination collecting hood in fluid communication with a decontamination chamber which effects light contaminant purging by creating a flow gradient within the chamber between turbulent flow adjacent to the inlet end and laminar flow adjacent to the outlet end. It would have been obvious to further separate the light contaminants of Stegelman using the collecting hood and flow of either Lawson patents.

Response to Amendment

5) Claims 1-7, 10-16, 19-24, rejection under 35 U.S.C. 103(a) as being unpatentable over Jagannadh (5,238,538), is withdrawn in view of amended claim.

6) Claims 17-18 rejection under 35 U.S.C. 103(a) as being unpatentable over Jagannadh in view of Lawson (5,733,413) or Lawson (6,139,684) or Markham (5,580,446), is withdrawn.

7) Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Halpern
Primary Examiner
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